



COE Tiger Team Status Update



Tiger Team Objectives



- COE Tiger Team is a 4 month effort with participation by COE Eng, GCCS, COE-M, and GCCS-M
 - TT scheduled from 7 Jan thru 30 Apr 02.
- Established to accelerate getting COE 4.5 to a point where systems can start their formal integration, certification, operational test, and fielding process
 - On-site key dev teams to work hand-in-hand with test engineers to isolate problem causes and to make fixes
 - Same process that was used to "shape-up" both 2.X and 3.X baselines
- Success criteria:
 - Close all pri-1/2 GSPRs
 - Full 3.X functional equivalency and all new functionality properly working
 - All stability, reliability, and performance issues addressed
- Solaris-8 and W2K are targeted baselines
 - HP and NT will be delivered after Tiger Team completion based on recompilation of above baselines



Approach

- The initial emphasis is on establishing a “baseline” of known issues, then addressing problems starting with pri-1/2 GSPRs.
- Addressing all the Pri-1/2 GSPRs doesn’t necessarily mean we have a useable/fieldable system
 - We need to address stability, reliability, and performance issues in a system level environment with operational segments loaded/in use.
- The TT approach in addressing performance and reliability concerns are:
 - First we work to close the high pri STRs in order to effectively evaluate core baseline....
 - Second, through a series of system level stress test events we identify potential stability, reliability, and performance issues
 - We deal with identified issues until they are resolved



COE Tiger Team March Schedule

**2/25-3/1/02****3/4-8/02****3/11-15/02****3/18-22/02****3/25-30/02**

- COE Drops include the following components:
- Kernel - ICSF - XIS/XISMI - CCE/CME - Reqd COE Cmpts
- Security Templates

Customer Applications System Test

GCCS/GCCS-M OAG/SYSADMIN**OAG Usability STR/SCP Adjudication**

COE IPR

COE TT Development team INRI/Polexis

JPL Kernel Support On-site at TT

APM Merge Host Validation**DAC Implementation****Develop COE Stress Test 2 Objectives****Conduct COE Stress Test 2 Review****Develop COE Stress Test 3 Objectives****IMS/JMU/JMA****ATOX****SCTD****MTC****TMSC****TBMWWD****Kernel P7 (Beta 2)****OS Update****Security Template Validation****COMPOSE****Lab Re-configure****COE Drop 9 System Test****COE Drop 10 System Test****COE Drop 11 System Stress Test****COE Drop 12 System Test****COE Drop 13 System Test****COE Drop 8/9-2/28****COE Drop 10-3/7****COE Drop 11-3/14****COE Drop 12 -3/21 COE Drop 13-3/27****Eng Release 2**



COE Tiger Team April Schedule

4/1-5/02**4/8-12/02****4/15-19/02****4/22-26/02**

- COE Drops include the following components:
- Kernel - ICSF - XIS/XISMI - CCE/CME - Reqd COE Cmpts - Security Templates

Customer Applications System Test

COE IPR

COE TT Development team INRI/Polexis

JPL Kernel Support On-site at TT

Develop COE Stress Test 3 Objectives

Conduct COE Stress Test 3 Review

COE Drop 13 System Test**COE Drop 14 System Test****COE Drop 15 Regression Test and System Stress Test****COE Drop 14-4/4****COE Drop 15-4/11**



Activities To Date

- Imported all open GSPRs to COE-M CM data base and established the baseline of valid problems
- All Open Pri-1/2's against the "COE foundation" assigned to a worklists for the weekly TT builds
- 7 TT drops of ICSF and 6 of XIS and CCE/CME delivered to date
 - 62 pri-1s, 197 pri-2s, 225 lower pri GSPRs validated closed (does not include items addressed in eng drop 7)
- Have been working with JPL via telcon to discuss/work kernel related issues and they are now on-site
- Coordinating with COE Eng regarding high pri items outside ICSF/ XIS/Kernel/CCE/CME area
- "Grey Beard" team brought in to look at provide fresh look at potential architectural/technical issues
 - Includes SUN engs and senior s/w engs from other companies



Activities To Date (cont.)

- Conducted first Stress/Capability Baseline Test (15-19 Feb)
 - UCP throughput testing verified that 4.X was significantly better than 3.X with approx same resource rqmts
 - With same data input injected into TMS, both the 3.x and 4.X used approx. the same resources and ended with same number of tracks/histories/etc.
 - Stress Test was overall better than previous test, but encounter numerous problems due to procedural/process issues (e.g., inappropriate data input rates) and issues with the software itself.
 - Meeting on-going this week to discuss lessons learned/issues and to establish an on-going "system/stress test process"
 - Report of test findings posted
- First TT Eng Release posted Thurs 21 Feb
 - 2nd Eng Release planned for end of March
 - Final TT release (30 Apr) will be basics for COE 4.6



Activities To Date (cont.)

- Post Stress Test, started reload/reconfiguration to KP7beta2 and latest infrastructure segments plus TT drop 7
 - Encountered installation problems with P7 beta 2 (JPL came on-site to isolate problems)
 - Shifted back to P6
- Shifting to two primary test LANS for STR fix/regression testing and for continual system stress/KPP testing
- Began work to define KPP's for COE foundation
 - Looking at 3.X equivalence as "threshold" while establishing higher "target" values
 - Besides raw performance numbers, looking at CPU and memory threshold for the foundation



Software Metrics Grouping



- The COE TT will report out weekly the STR open/close progress of following software groupings:

- **Common Applications**

- CCE
- CME
- CNTP
- CST
- **TBMWD ***
- **TMSC ***
- **NJI ***
- **I3 ***
- **TIBS ***
- **TADIL-A/B ***
- SCTD
- **ATOX ***
- **MTC ***

- **ICSF**

- AFW
- IFL
- JMV
- JMVMD
- TMS
- TMSSD
- TMSV
- UCP

- **XIS/XISMI**

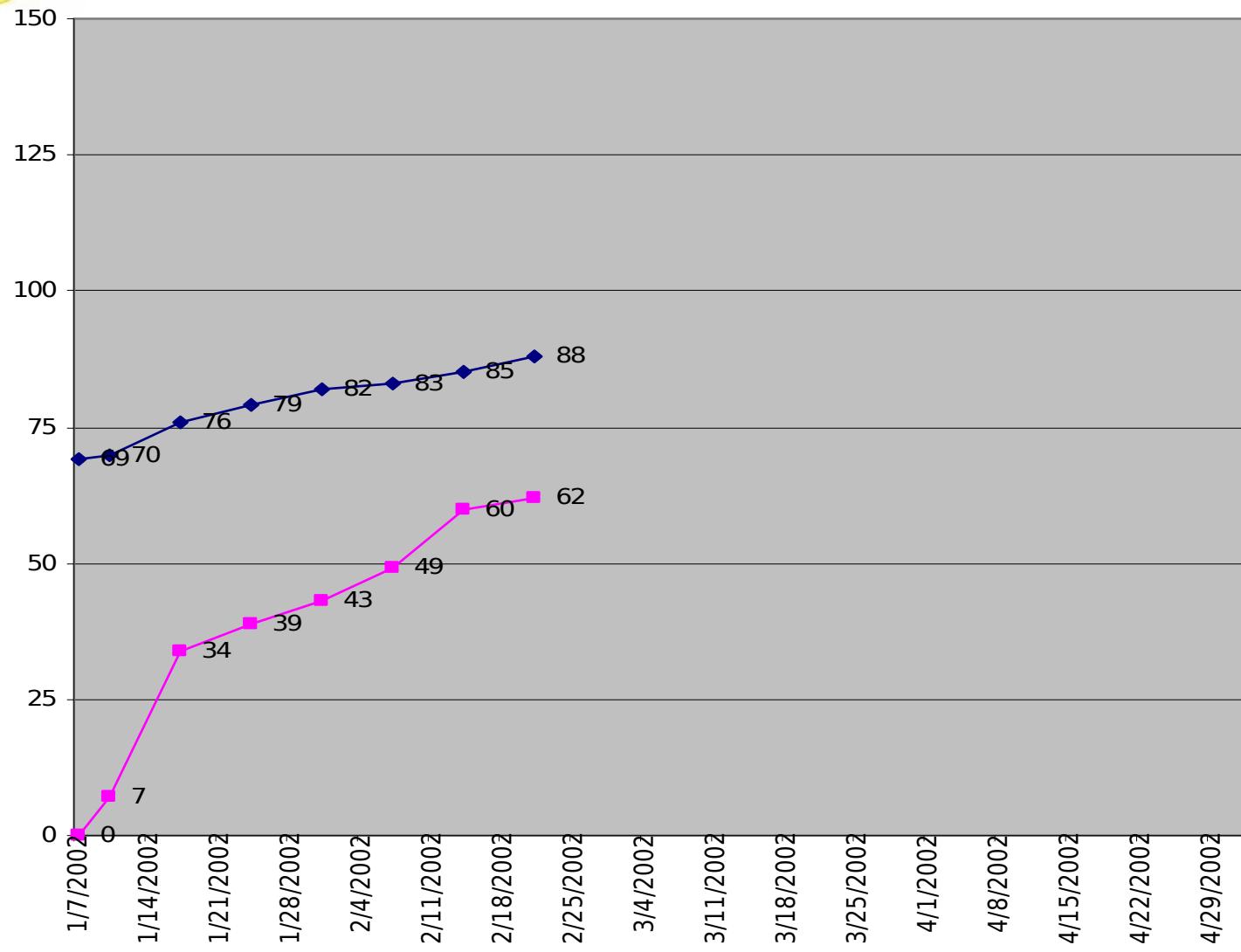
- **Infrastructure**

- COE Kernel
- SOLPTH
- W2KPTH
- JAVA2
- WEBBr
- PERL
- SPCFG
- NMSP
- W2KCET/CNF
- SECBNR
- UPDTSL
- SBDATA
- SMB
- PRINTS
- PRINTC
- PRINTD
- ONDOC
- CIFS
- JMA/JMS/JMU

Applications denoted with an * are common/joint apps used for system loading

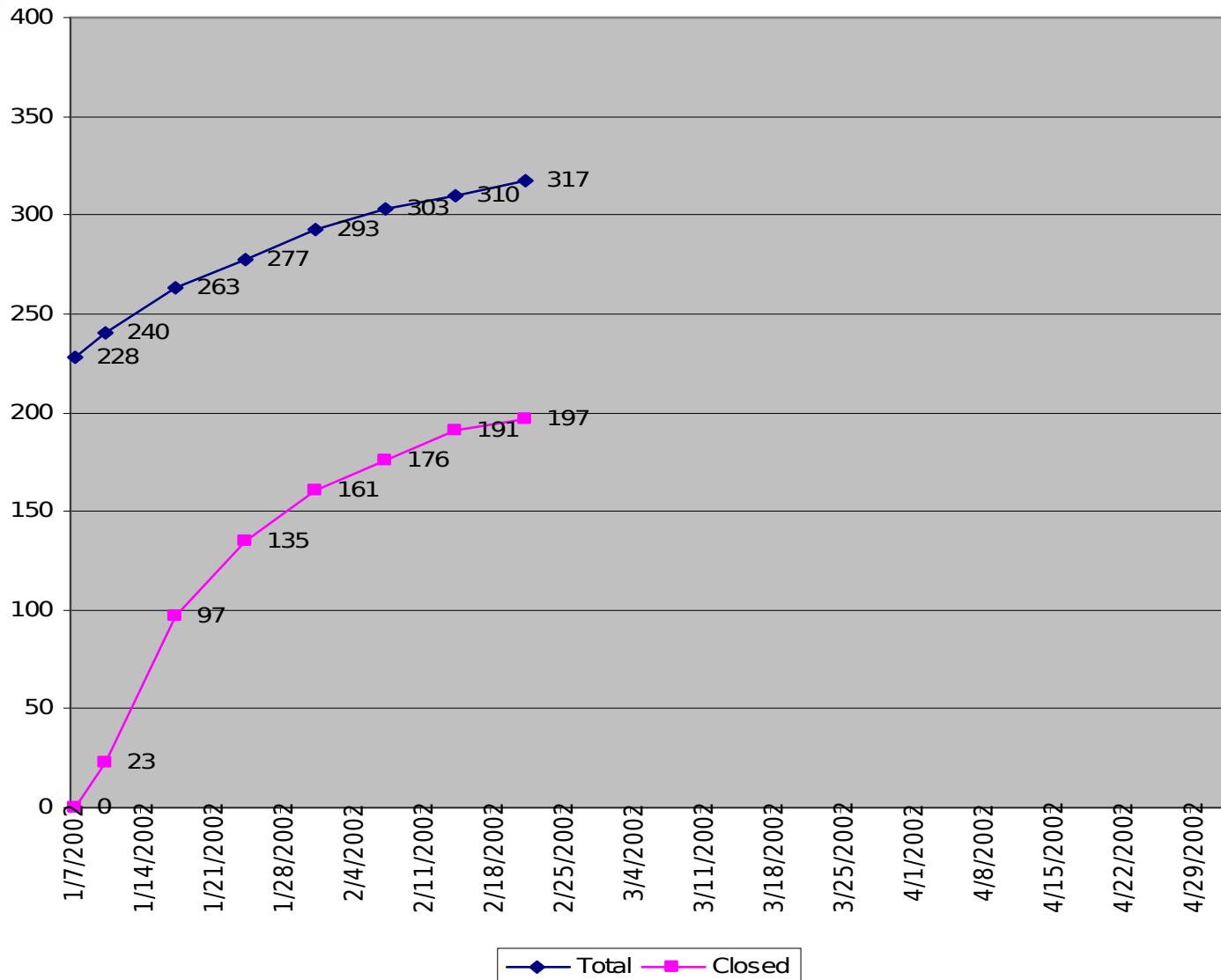


Software Pri-1 Metrics



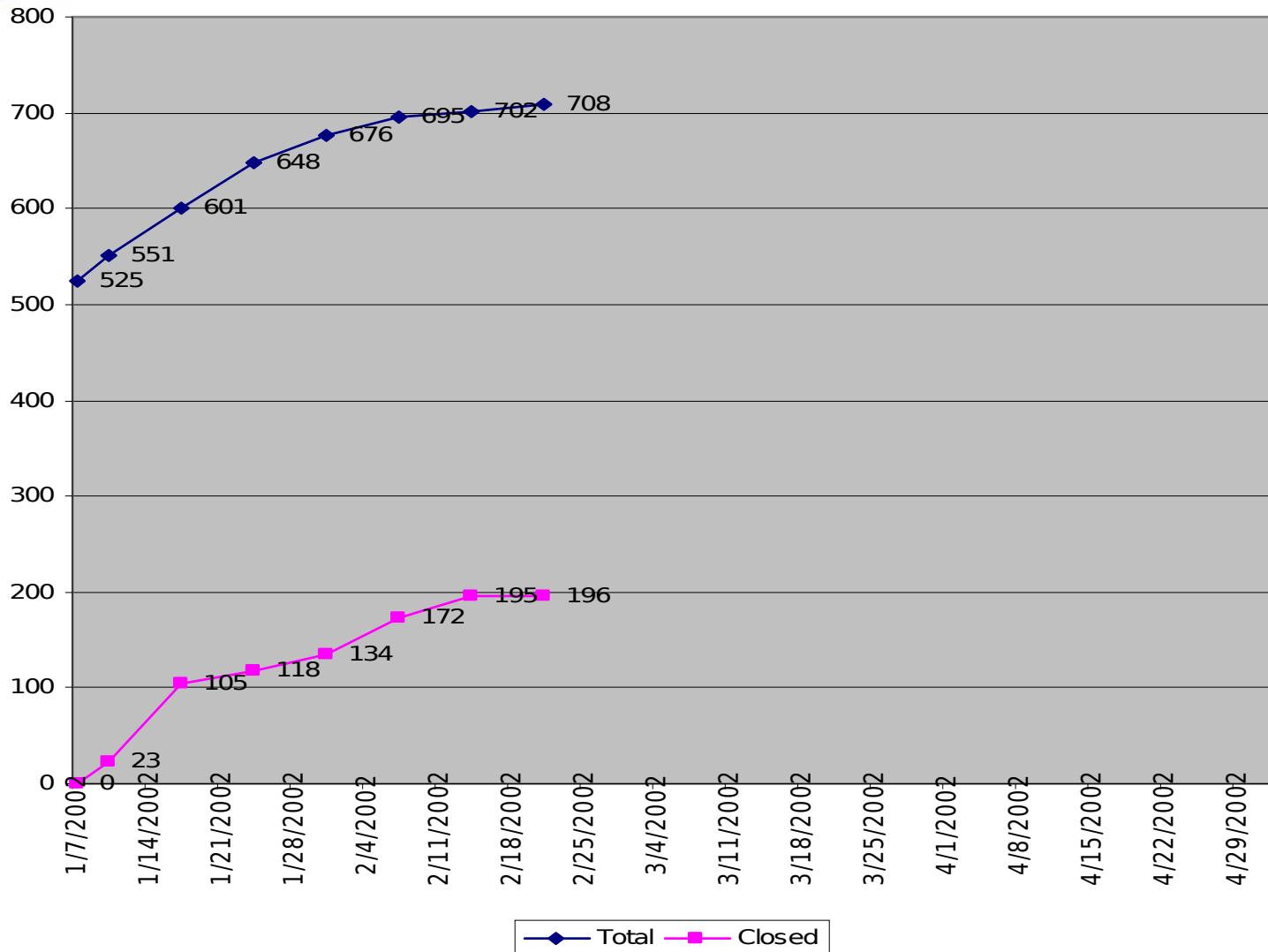


Software Pri-2 Metrics



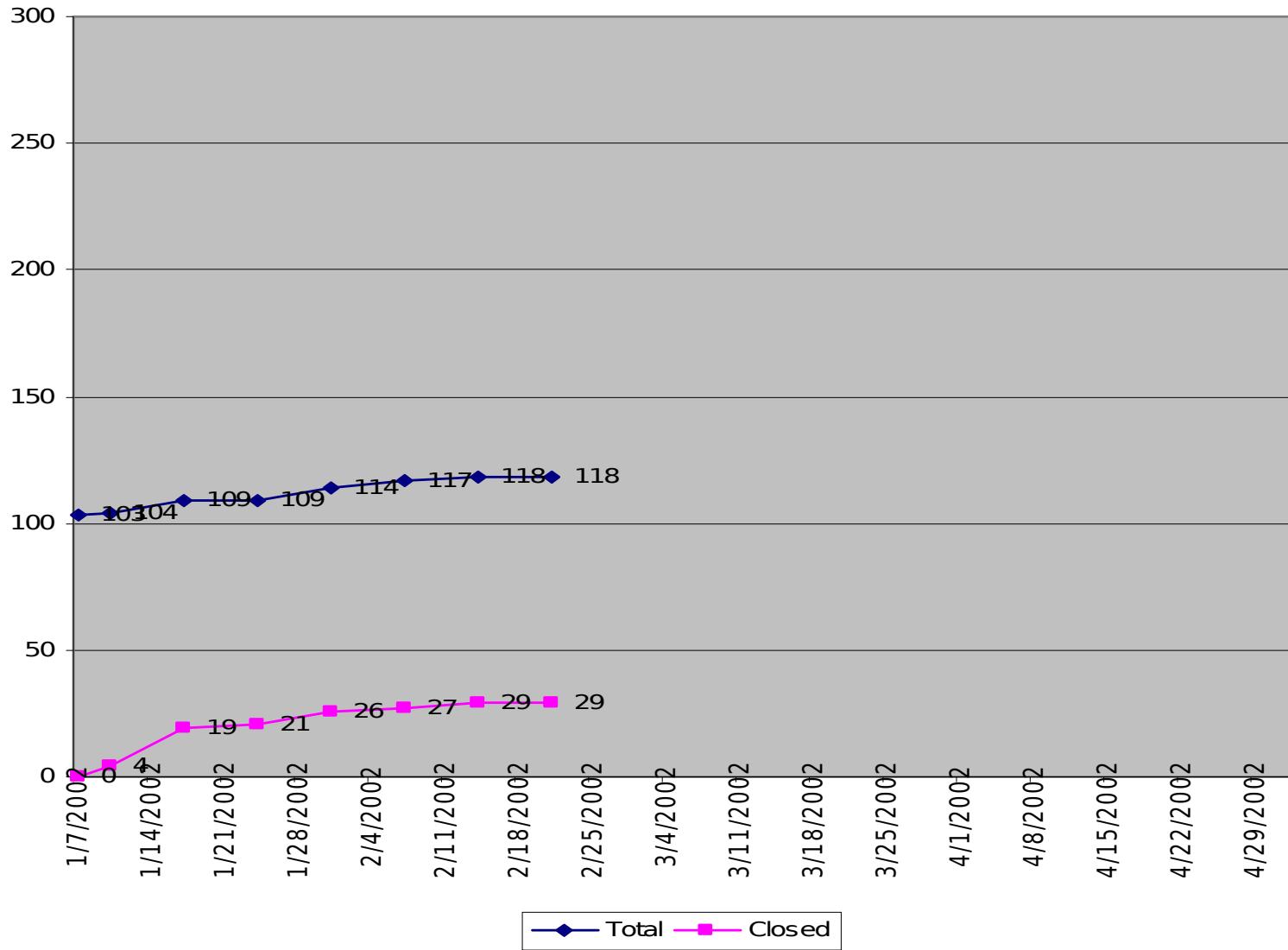


Software Pri-3/4/5 Metrics





Software SCP Metrics





Metrics Data

ICSF	1/7	1/10	1/17	1/24	1/31	2/7	2/14	2/21	2/28	3/7	3/14	3/21	3/28	4/4	4/11	4/18	4/25	5/2
Pri-1 Total:	52	53	57	60	63	63	63	65										
Pri-1 Closed:	0	5	29	33	36	41	50	51										
Pri-2 Total:	158	166	185	193	206	213	219	217										
Pri-2 Closed:	0	21	74	98	112	123	135	139										
Pri-3/4/5 Total:	269	287	318	357	374	379	383	384										
Pri-3/4/5 Closed:	0	19	47	52	57	87	99	100										
Total SCPs:	66	67	71	71	73	76	77	77										
SCPs Closed:	0	2	17	19	23	24	26	26										
XIS/XISMI	1/7	1/10	1/17	1/24	1/31	2/7	2/14	2/21	2/28	3/7	3/14	3/21	3/28	4/4	4/11	4/18	4/25	5/2
Pri-1 Total:	5	5	7	7	7	8	8	9										
Pri-1 Closed:	0	0	2	2	2	3	5	5										
Pri-2 Total:	17	18	19	19	20	21	21	25										
Pri-2 Closed:	0	0	4	9	9	11	11	11										
Pri-3/4/5 Total:	43	45	49	50	54	54	54	58										
Pri-3/4/5 Closed:	0	0	10	10	13	14	15	15										
Total SCPs:	4	4	5	5	5	5	5	5										
SCPs Closed:	0	0	0	0	0	0	0	0										
CMN APPLS	1/7	1/10	1/17	1/24	1/31	2/7	2/14	2/21	2/28	3/7	3/14	3/21	3/28	4/4	4/11	4/18	4/25	5/2
Pri-1 Total:	4	4	4	4	4	4	5	5										
Pri-1 Closed:	0	0	0	0	0	0	0	1										
Pri-2 Total:	24	27	29	35	35	35	36	36										
Pri-2 Closed:	0	0	2	9	20	22	25	26										
Pri-3/4/5 Total:	22	25	33	38	39	46	48	48										
Pri-3/4/5 Closed:	0	0	0	0	3	9	17	17										
Total SCPs:	4	4	4	4	4	4	4	4										
SCPs Closed:	0	0	0	0	0	0	0	0										
INFRASTRUCTURE	1/7	1/10	1/17	1/24	1/31	2/7	2/14	2/21	2/28	3/7	3/14	3/21	3/28	4/4	4/11	4/18	4/25	5/2
Pri-1 Total:	8	8	8	8	8	8	9	9										
Pri-1 Closed:	0	2	3	4	5	5	5	5										
Pri-2 Total:	29	29	30	30	32	34	34	39										
Pri-2 Closed:	0	2	17	19	20	20	20	21										
Pri-3/4/5 Total:	191	194	201	203	209	216	217	218										
Pri-3/4/5 Closed:	0	4	48	56	61	62	64	64										
Total SCPs:	29	29	29	29	32	32	32	32										
SCPs Closed:	0	2	2	2	3	3	3	3										
Software Totals	1/7	1/10	1/17	1/24	1/31	2/7	2/14	2/21	2/28	3/7	3/14	3/21	3/28	4/4	4/11	4/18	4/25	5/2
Pri-1 Total:	69	70	76	79	82	83	85	88										
Pri-1 Closed:	0	7	34	39	43	49	60	62										
Pri-2 Total:	228	240	263	277	293	303	310	317										
Pri-2 Closed:	0	23	97	135	161	176	191	197										
Pri-3/4/5 Total:	525	551	601	648	676	695	702	708										
Pri-3/4/5 Closed:	0	23	105	118	134	172	195	196										
Total SCPs:	103	104	109	109	114	117	118	118										
SCPs Closed:	0	4	19	21	26	27	29	29										



OAG

- OAG draft msg in review – GCCS/GCCS-M for action
- Date & Location: 11-15 Mar 2002 at SPAWARSYSCEN San Diego, Seaside Bldg 600, Room 257
- Purpose: Conduct User and Sysadmin evaluation of DII COE 4.5 in the following areas of interest:
 - Displaying information
 - Sharing information
 - Updating information
 - Querying for information



Looking Ahead

- Continue addressing identified STRs
 - Rapidly closing on Pri-1/2 completion
- Work with JPL to address kernel issues
- Identify any significant items that can be addressed post TT
- Complete identification on KPP's and determine where we stand
 - Take action to address any identified issues
- Continue System Stress testing to identify stability, reliability, and performance issues
 - Address identified issues



QUESTIONS ?